Amendments to the claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Cancelled)

2. (Previously Presented) Imaging method according to claim 14, characterised in that the imitation (8) is a block of constant thickness and in a homogeneous material, with an attenuation similar to a base material of the object.

3. (Previously Presented) Imaging method according to claim 14, characterised in that the taking of the measurement table is a selection in a series of scattered diffusion measurement tables, obtained by successively passing the initial radiation through a respective series of imitations of the object, which are blocks of different but constant thickness and in a homogeneous material, having an attenuation similar to a base material of the object.

4. (Original) Imaging method according to claim 3, characterised in that the selection comprises an interpolation between two tables of measurements.

5. (Previously Presented) Imaging method according to claim 3, characterised in that the selection is carried out by comparing a value of the total

measurement radiation through the object and a value of the total measurement

radiation through the imitations.

6.   (Original)   Imaging method according to claim 5, characterised in that the

comparison is carried out for identical rays (13) of the initial radiation through the

object and the imitations, only going through the base material of the object.

7.   (Cancelled)

8.   (Cancelled)

9.   (Previously Presented)   Imaging method according to claim 14,

characterised in that it comprises a step of low pass filtering of the transposition

coefficients, arranged in a table superposable on the table of measurements.

10.   (Cancelled)

11.   (Previously Presented)   Application of the method according to claim 14 to

tomography.

12.   (Previously Presented)   Application of the method according to claim 14 to

bone densitometry.

13.   (Previously Presented)   Application of the method according to claim 14 to

non-destructive controls.

14.   (Currently Amended)   An object imaging method by multiple

acquisitions, the acquisitions consisting in passing a radiation through the object,

measuring the radiation having passed through the object, the radiation being

attenuated through the object from an initial radiation (Φ_0) to a total measurement

radiation (Φ_t object), and subtracting an estimation of a scattered radiation (Φ_d

object) from the total measurement radiation, the measurement radiation and

scattered radiation consisting of values associated to respective parts of the object,

and wherein:

for at least one of said acquisitions, ~~15~~ values of scattered radiation (Φ_d

imitation) are measured in passing the initial radiation through an imitation (8) of the

~~objet,~~ object, transposition coefficients (K) relating the scattered radiation through

the object to the scattered radiation through the imitation (8) are calculated based on

the initial radiation (Φ_0), the total measurement radiation (Φ_t object) through the

object and a total measurement radiation through the imitation (Φ_t imitation),

the scattered radiation through the object in estimated with the transposition

coefficients and the scattered radiation through the imitation,

the values of total measurement radiation through the objects, the values of

scattered radiation through the imitation and the transposition coefficients being

spread in respective tables comprising corresponding elements so that each of the

transposition coefficients is associated to a respective part of the object.

15.   (Previously Presented)   An object imaging method according to

claim 14, wherein the coefficients are computed according to the formula:

K= $\underline{[\Phi_t \log (\Phi_t/\Phi_o)] \text{ object}}$

       $[\Phi_t \log (\Phi_t/\Phi_o)] \text{ imitation}$.